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Acute Coronary Syndromes

FACTOR PREVALENCE, GENDER DISTRIBUTION AND CLINICAL OUTCOMES OF A YOUNG COHORT OF PATIENTS WITH ST SEGMENT ELEVATION MYOCARDIAL INFARCTION UNDERGOING PRIMARY PERCUTANEOUS CORONARY INTERVENTION IN A LARGE SAFETY NET COUNTY HOSPITAL

Poster Contributions
Hall C
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Session Title: Acute Coronary Syndromes: STEMI
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Background: The incidence of ST elevation infarction (STEMI) in young patients is rising. Delay in care may occur in a young patient without risk factors if acute myocardial infarction (AMI) is not suspected on presentation. The aim of this study is to assess the risk factors prevalence, gender distribution, time to treatment and mortality in a young population presenting STEMI.

Methods: This is a retrospective analysis of 691 consecutive STEMI patients between 2006 and 2012 in a single large county hospital in Miami, FL. A cohort young patients (male <45 years and female <55) were selected for analysis of racial demographics, risk factor prevalence, time to treatment and mortality.

Results: A total of 125 patients with STEMI were included. By ethnicity the population was 48.8% Blacks, 44% Latinos and 7.2% Whites. Regarding the prevalence of risk factors more young woman than men had hypertension (HTN), 78.7% vs. 58.4 (P=0.016); diabetes (DM) 44.6% vs.16.8% (P=0.001), and pre-existent coronary artery disease (CAD) 38.2% vs. 20.7% (P=0.029). There was no statistical difference in the prevalence of other major risk factors including hyperlipidemia, smoking and family history of CAD. Remarkably there was a significant time delay to first EKG between young woman 43.5 min vs. 16.4 min for men with a mean difference of -26.64 minutes (P=0.03). Similarly door to balloon time mean of 100.2 min for young woman vs. 59.6 for men with a mean difference of -40.6 (P=0.04). There was no difference in the culprit artery, number of vessels or type of stent. There was a significantly lower post AMI ejection fraction (EF) by gender, defined based on EF< 35%, 27.9% for young woman vs. 15% for men (P=0.08). Despite delay to treatment and lower EF there was no difference in hospitalization stay and mortality between the groups, (P=0.3).

Conclusions: Minorities are overrepresented in a cohort of young patients with AMI. Young women with STEMI have a higher burden of risk factors compared to young men, including DM, HTN and previously diagnosed CAD. Comparative mortality was not affected despite delayed treatment and lower EF. These findings underscore the need to design strategies especially targeting rapid triage of young women with STEMI.